

REMARKS**I. Amendments**

Claims 8-10 and 17-22 are canceled. New claims 31-39 are added. Claims 1-7, 11-16 and 23-30 have been withdrawn from consideration as being directed to non-elected subject matter. The newly added claims do not constitute new matter and are completely supported throughout the specification and originally filed claims. More particularly, newly added claims 31-39, drawn to a transgenic mouse whose genome comprises a disruption in a chemokine receptor 9A gene, cells derived from said mouse, and a method of producing said mouse can be found, for example, at page 11, line 6 through page 17, line 27, at page 53, line 20 through page 55, line 24, of the specification, and in claims 8-10 and 17-22 as originally filed.

The foregoing amendments are made solely to expedite prosecution of the application and are not intended to limit the scope of the invention. Further, the amendments to the claims are made without prejudice to the pending or now canceled claims or to any subject matter pursued in a related application. The Applicant reserves the right to prosecute any canceled subject matter at a later time or in a later filed divisional, continuation, or continuation-in-part application.

Upon entry of the amendment, claims 31-39 are pending in the instant application.

II. Claim Objections

Claim 22 has been objected to by the Examiner in that claim 22 is directed to a cell derived from the transgenic mouse of claim 20. However, the Examiner asserts that claim 20 is directed to a method of making a mouse, and not the mouse itself. The Applicant has canceled claim 22, rendering this objection moot.

III Rejections***Rejection under 35 U.S.C. § 112, first paragraph***

The Examiner has rejected claims 8-10 and 17-22 under 35 U.S.C. § 112, first paragraph, because the claims contain subject matter which was not described in the specification in such a way as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In one aspect, with regard to claims 8, 10 and 20-21, the Examiner states that the specification fails to teach the production of any transgenic non-human animal comprising a

disruption in a chemokine receptor 9A gene other than a transgenic knockout mouse. The Examiner asserts that production of knockout animals other than mice is undeveloped in the art of knockout technology, because ES cell technology is generally limited to the mouse system, and that only “putative” ES cells exist for other species.

The Applicant respectfully traverses the rejection. The Applicant contends that the specification contains enabling disclosure for how to make and use the invention as claimed. However, the Applicant has cancelled claims 8-10 and 17-22, rendering this aspect of the rejection under 35 U.S.C. § 112, first paragraph, no longer relevant.

In another aspect of this rejection, the Examiner has stated that the specification is not enabling for a transgenic non-human animal with no phenotype other than a wild-type phenotype due to the unpredictability in the art of phenotypes resulting from disruption of genes. The Applicant respectfully traverses this aspect of the rejection. However, this aspect of the rejection under 35 U.S.C. § 112, first paragraph, is no longer relevant in light of the cancellation of claims 8-10 and 17-22.

Finally, according to the Examiner, the specification has failed to provide guidance that correlates a phenotype of decreased agility, coordination or balance with any disease. The Examiner states that the specification has not provided any other uses for transgenic mice exhibiting a phenotype of decreased agility, coordination, or balance. Therefore, the Examiner alleges that the specification has failed to provide guidance that would enable the skilled artisan to use the claimed transgenic mouse.

The Applicant respectfully traverses this aspect of the rejection. The Applicant submits that the specification as originally filed provides ample guidance for how to use the transgenic animals as claimed. For example, the specification discloses that the transgenic mice may be used to determine the effect of agents on a phenotype of the transgenic animals, such as, for example, agility, coordination or balance (see, for example, Page 21 of the instant specification). Moreover, a skilled artisan would be aware that transgenic mice exhibiting a lack of coordination, balance or agility would be valuable for the discovery of agents that improve coordination, balance or agility, or recover impaired coordination, balance or agility. As another example, the transgenic mice have been disclosed to be useful for the determination of the effect of agents on the expression or function of the disrupted chemokine receptor 9A gene, and, more particularly, can be used to test agents that recover the disrupted expression of the gene (see, for

example, Page 28 of the specification). The skilled artisan would know that agents that affect expression or function of the chemokine receptor 9A would be assumed to have an effect on the phenotype, and specifically on the impaired agility, coordination or balance as described in the specification and recited in the pending claims.

New claims 31-39 are drawn to a transgenic mouse, a method of making the mouse and a cell obtained therefrom, whose genome comprises a disruption in a chemokine receptor 9A gene, which mouse exhibits a specific phenotype disclosed in the application, and more particularly, a phenotype of decreased agility, coordination or balance. The Applicant contends that new claims 31-39 are fully enabled by the disclosure of the instant specification. In particular, the specification has described the transgenic mouse, cells and methods as claimed in the new claims 31-39 so that one skilled in the art would be apprised of how to make the transgenic mouse and cells and tissues as claimed. Moreover, as noted above, the specification provides sufficient guidance to allow one skilled in the art to use the transgenic mouse as claimed,

In view of the cancellation of claims 8-10 and 17-22, and the submission of new claims 31-39, which are completely enabled by the specification as originally filed for the reasons noted above, the rejection under 35 U.S.C. § 112, first paragraph, is no longer relevant. Therefore, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

It is believed that the claims are currently in condition for allowance, and notice to that effect is respectfully requested. The Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1271 under Order No. R-365.

Respectfully submitted,

Date: _____

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